



## NORTHWEST POWER NORTHWEST VALUES

**Job Title & Series:**

Electrical Engineer, GS-850

**Job Announcement Number:**

9693-12-DE

**Grade & Salary Range:**

GS-12: \$72,540 - \$94,300

GS-13: \$86,260 - \$112,136

Full performance level: GS-13. May be filled at any level above.

**Opens:** 01/05/2012

**Closes:** 01/19/2012

(Applications must be received by 11:59 p.m. Pacific Time)

**Anticipated number of positions to be filled:** More than one position may be filled

**Location:** Vancouver, WA

**Type of Position:** This is a Permanent position with a full-time work schedule.

**Benefits:** BPA offers a comprehensive benefits package. <http://www.jobs.bpa.gov/Benefits/>

### Eligibility

All United States citizens are eligible to apply.

*NOTE: You must submit separate and complete application packages for each vacancy for which you would like to be considered. This includes current or former federal employees eligible for transfer or reinstatement, veterans eligible for appointment under the Veterans' Employment Opportunities Act or other veterans' programs, and others eligible under special hiring authorities may apply under external announcements and internal Merit Promotion procedures: **9696-12**.*

### About BPA

The Bonneville Power Administration has been powering people and careers for nearly 75 years. We are a non-profit federal agency that provides clean, emissions-free electricity to the Pacific Northwest and maintains a high voltage transmission system to deliver that electricity. We are a leader in sustainability and environmental stewardship, promoting energy efficiency, renewable energy, the smart grid, fish and wildlife protection and initiatives to address climate change. We are a visionary and innovative agency that values diversity and creativity and encourages continuous learning. We are located throughout the Pacific Northwest with opportunities in cities, smaller communities and rural areas. You can learn more about BPA at [www.bpa.gov](http://www.bpa.gov).

### Job Summary & Major Duties

Join us in an exciting opportunity to create strategic and innovative solutions that facilitate the achievement of critical business objectives and improved organizational effectiveness. In the role as an electrical engineer for System Protection and Control, System Control Engineering, you will provide technical leadership for Transient Analysis and authoritative technical consultation, studies, and direction within Engineering and Technical Services as well as to the Transmission organizations.

You will provide comprehensive engineering, training, design, field support, testing, evaluation, expertise in modeling power systems and components, performing analytical studies with these models, and recommending techniques for improving power system performance and reliability based on these studies.

Your duties will include:

- Performing modeling/analysis studies on issues involving transient phenomena, transient and dynamic performance of the transmission system and associated high-voltage equipment and serves as a consultant to engineers and other technical personnel throughout BPA, providing advice on a wide range of extremely complex transient analysis issues.
- Performing engineering studies to analyze and evaluate transient and dynamic performance of the transmission system; determine equipment specifications, interconnection practices, and mitigation measures necessary to ensure appropriate transient and dynamic performance of the transmission system; and lead actions to ensure that transient and dynamic performance issues are analyzed, understood and appropriately addressed.
- Developing and maintaining Electromagnetic Transients Program, ATP Draw, and other study tools necessary to provide power system engineers with methods to model the transient performance of the transmission system and system components.

- Provides short and long range planning for relaying systems. Determines operational requirements for these systems and initiates project proposals to replace obsolete equipment. Maintains familiarity with advanced technology and coordinates maintenance requirements with design organizations and manufacturers. Initiates special tests to evaluate new equipment. Interprets overall BPA policy and standards for BPA metering and control systems, based on maintenance and operating requirements.

## Qualifications

### SPECIALIZED EXPERIENCE

**GS-12:** Experience assisting with engineering studies.

**GS-13:** Experience performing engineering studies, especially modeling/analysis, of power system transients on a transmission system.

In order to be rated as meeting the minimum qualifications, we must be able to determine from your application package (includes resume, cover letter and or other supporting material) that you have a minimum of **one year** of the specialized experience requirement described above. *Applicants who have qualifying experience performed on less than a full-time basis must specify the percentage and length of time spent in performance of such duties.*

### EDUCATION

*To be rated as qualified for this position, college transcripts are required.*

A. Degree: professional engineering. To be acceptable, the curriculum must: (1) be in a school of engineering with at least one curriculum accredited by the Accreditation Board for Engineering and Technology (ABET) as a professional engineering curriculum; or (2) include differential and integral calculus and courses (more advanced than first-year physics and chemistry) in five of the following seven areas of engineering science or physics: (a) statics, dynamics; (b) strength of materials (stress-strain relationships); (c) fluid mechanics, hydraulics; (d) thermodynamics; (e) electrical fields and circuits; (f) nature and properties of materials (relating particle and aggregate structure to properties); and (g) any other comparable area of fundamental engineering science or physics, such as optics, heat transfer, soil mechanics, or electronics.

### OR

B. Combination of education and experience – college-level education, training, and/or technical experience that furnished (1) a thorough knowledge of the physical and mathematical sciences underlying professional engineering, and (2) a good understanding; both theoretical and practical, of the engineering sciences and techniques and their applications to one of the branches of engineering. The adequacy of such background must be demonstrated by one of the following:

1. Professional Registration – Current registration as a professional engineer by any State, the District of Columbia, Guam, or Puerto Rico. Absent other means of qualifying under this standard, those applicants who achieved such registration by means other than written test are eligible only for positions that are within or closely related to the specialty field of their registration.

2. Written Test – Evidence of having successfully passed the Fundamentals-In-Engineering (FE) examination, or the written test required for professional registration, which is administered by the Boards of Engineering Examiners in the various States, the District of Columbia, Guam, and Puerto Rico. Applicants who have passed the examination and have completed all the requirements for either (a) a bachelor's degree in engineering technology (BET) from an accredited college or university that included 60 semester hours of courses in the physical, mathematical, and engineering sciences, or (b) a BET from a program accredited by the Accreditation Board for Engineering and Technology (ABET) may be rated eligible for certain engineering positions at the GS-5 level. Eligibility is limited to positions that are within or closely related to the specialty field of the engineering technology program.

3. Specified Academic Courses – Successful completion of at least 60 semester hours of courses in the physical, mathematical, and engineering sciences and in engineering that included the courses specified in the basic requirements. The courses must be fully acceptable toward meeting the requirements of a professional engineering curriculum as described in paragraph A.

4. Related Curriculum – Successful completion of a curriculum leading to a bachelor's degree in engineering technology or in an appropriate professional field, e.g., physics, chemistry, architecture, computer science, mathematics, hydrology, or geology, may be accepted in lieu of a degree in engineering, provided the applicant has had at least 1 year of professional engineering experience acquired under professional engineering supervision and guidance.

### Education obtained outside the United States:

If your education has been obtained outside the U.S, you must submit proof with your application that your transcripts have been evaluated by a private organization that specializes in interpretation of foreign educational credentials and have been deemed at least equivalent to that gained in conventional U.S. education institutions.

NOTE: You must submit college transcripts with your application (copies are acceptable. If selected, you will be required to provide originals).

### KNOWLEDGE, SKILLS, AND ABILITIES

Your application materials will be reviewed against the knowledge, skills and abilities (KSAs) listed below to determine your category rating: Best Qualified, Highly Qualified, or Qualified. Within these categories, applicants eligible for veteran's preference will receive selection priority.

Please describe your experience and thoroughly address the statements below within your resume, cover letter, and/or other supporting material you choose to submit. Work product examples will not be reviewed unless specifically requested. **Clearly articulating your work experience to determine the application of this knowledge, these skills or abilities through performance is critical to determining your qualifications for this position.** For more information on how to provide supporting information for KSAs, please visit [http://jobs.bpa.gov/How\\_To\\_Apply/ksa.cfm](http://jobs.bpa.gov/How_To_Apply/ksa.cfm).

1. **Knowledge of the theories and principles of electrical engineering and power system transients sufficient to study, model and simulate transmission networks in order to identify and resolve transient issues. Including:**
  - *Power system transient analysis*
  - *Power system modeling software familiarity*
  - *Fault studies, power flow studies, or stability studies conducted*
  - *Transient issues identified and resolved*
2. **Experience installing, maintaining, configuring and troubleshooting electric utility protective relays and control systems equipment.**
3. **Ability to present highly technical information in written or verbal form to individuals both inside and outside of the organization on a variety of controversial or complex issues. Including:**
  - *Technical information or issues communicated*
  - *Audiences communicated with*
  - *Format of communications*
  - *Controversial communications*

### ADDITIONAL REQUIREMENTS

- Applicants must possess and maintain a current valid State's Driver License as a condition of appointment. If selected, you will be required to provide proof that you meet this requirement.
- 1 to 5 nights of overnight travel per month is a requirement of the position.

### SECURITY & SUITABILITY

The sensitivity level of this position is designated as 'Low Risk – Nonsensitive', which requires that the selectee pass a National Agency Check with Inquiries (NACI) personnel investigation and receive a favorable suitability determination. For more information please visit: [http://jobs.bpa.gov/How\\_To\\_Apply/faqs.cfm#18](http://jobs.bpa.gov/How_To_Apply/faqs.cfm#18)

### Application Package Checklist

- ☐ Resume, cover letter, and/or other supporting material you choose to submit that fully describe your education and experience. Application must contain sufficient information to determine eligibility for the position. (Optional Application for Federal Employment (OF-612): <http://www.usajobs.opm.gov/of612.asp>).

#### **Applications must include the following information:**

- Job Announcement number, title, and grade
- Full legal name, mailing address, contact telephone number and email address
- Country of citizenship (SSN or other ID is not requested at this time)
- High school attended which includes name of high school and location.
- Employment history including unpaid positions with job title, grade (if Federal), duties and accomplishments, employer's name and address, supervisor's name and phone number, starting and ending dates (month and year), salary, and hours worked per week. Explain any gaps in employment.
- Indication if we may contact your current supervisor.
- List of other job-related training, skills, certificates and licenses, recognition, professional memberships, publications, leadership activities, or other relevant information.
- Grade level(s) for which you are applying.

- ☐ College transcripts (photocopies are acceptable).
- ☐ Additional documents as specified in 'Additional Requirements'.
- ☐ VETERANS: To be considered for veteran's preference, a copy of your DD-214 (Member 4) is required. 10-point veterans must also provide a copy of their SF-15 and associated documentation.
- ☐ All applicants are encouraged to complete and submit BPA Form F3330-11e, Applicant Disability, Race/National Origin and Gender Identification form and Applicant Source Form located at the end of this announcement, or at [http://jobs.bpa.gov/How\\_To\\_Apply/forms.cfm](http://jobs.bpa.gov/How_To_Apply/forms.cfm).

## How to Submit Your Application

Applications may be emailed, faxed or mailed. Due to security requirements, we only accept hand-delivered application from individuals who currently have badge access to the building.

- **Email to:** [jobs@bpa.gov](mailto:jobs@bpa.gov) with the Job Announcement Number in the subject line and on any attachments.
- **Fax to:** 503-230-3149
- **Send via US Mail to:** Bonneville Power Administration, ATTN: Human Capital Management, NHQ-1, PO Box 3621, Portland, OR 97208-3621.

You will be notified via email to confirm receipt of your application package. *Applicants should retain a copy of their application as BPA does not return applications or provide copies.* For more information on the hiring process, please refer to: [http://jobs.bpa.gov/How\\_To\\_Apply/whathappens.cfm](http://jobs.bpa.gov/How_To_Apply/whathappens.cfm).

## Additional Information

**Veterans Information:** <http://www.usajobs.gov/vi>

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### Career Transition Assistance Program/Interagency Career Transition Assistance Program

**(CTAP/ICTAP):** Federal employees seeking CTAP/ICTAP eligibility must submit proof that they meet the requirements of 5 CFR 330.605 (a) for CTAP and 5 CFR 330.704 for ICTAP. This includes a copy of the agency notice, a copy of their most recent Performance Rating and a copy of their most recent SF-50 noting current position, grade level, and duty location. **Please annotate your application to reflect that you are applying as a CTAP or ICTAP eligible.** For additional information please refer to <http://www.opm.gov/ctap/>

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**EEO Policy Statement:** <http://www.usajobs.gov/eeo>

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**Reasonable Accommodation Policy Statement:** <http://www.usajobs.gov/raps>

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**Legal and Regulatory Guidance:** <http://www.usajobs.gov/lrg>

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**Forms Availability:** All application materials may be obtained by calling 503-230-3230, or 1-877-975-4272 or visiting: <http://www.jobs.bpa.gov>.

## **Applicant Source Form**

The Bonneville Power Administration's Human Capital Management office has an ongoing process improvement objective associated with recruitment and outreach strategies. In order for us to assess the effectiveness of our current advertising and Recruitment efforts, please identify how you learned about this job by marking the appropriate box below:

Vacancy Announcement Number	Position Title, Series, Grade
<input type="text"/>	<input type="text"/>

☐ **BPA Website**

☐ **USAJOBS Website**

☐ **Job Board** (CareerBuilder, Craigslist, Employment Dept, etc.)

**(please specify):** \_\_\_\_\_

☐ **Industry Website or Event** (National Institute of Government Purchasers, GreenDrinks, etc.)

**(please specify):** \_\_\_\_\_

☐ **Social Media Website** (Facebook, LinkedIn, etc.)

**(please specify):** \_\_\_\_\_

☐ **Career Fair** (campus events, community event)

**(please specify):** \_\_\_\_\_

☐ **BPA employee**

☐ **Other (please specify):** \_\_\_\_\_

U.S. Office of Personnel Management Guide to Personnel Data Standards	<b>ETHNICITY AND RACE IDENTIFICATION</b> (Please read the Privacy Act Statement and instructions before completing form.)	
Name (Last, First, Middle Initial) <div style="background-color: #cccccc; width: 100px; height: 20px;"></div>		
Agency Use Only		
<b>Privacy Act Statement</b>  Ethnicity and race information is requested under the authority of 42 U.S.C. Section 2000e-16 and in compliance with the Office of Management and Budget's 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Providing this information is voluntary and has no impact on your employment status, but in the instance of missing information, your employing agency will attempt to identify your race and ethnicity by visual observation.  This information is used as necessary to plan for equal employment opportunity throughout the Federal government. It is also used by the U. S. Office of Personnel Management or employing agency maintaining the records to locate individuals for personnel research or survey response and in the production of summary descriptive statistics and analytical studies in support of the function for which the records are collected and maintained, or for related workforce studies.		
<b>Specific Instructions:</b> The two questions below are designed to identify your ethnicity and race. <b>Regardless of your answer to question 1, go to question 2.</b>		
<b>Question 1. Are You Hispanic or Latino?</b> (A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.) <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Question 2.</b> Please select the racial category or categories with which you most closely identify by placing an "X" in the appropriate box. Check as many as apply.		
<b>RACIAL CATEGORY</b> (Check as many as apply)	<b>DEFINITION OF CATEGORY</b>	
<input type="checkbox"/> American Indian or Alaska Native	A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.	
<input type="checkbox"/> Asian	A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.	
<input type="checkbox"/> Black or African American	A person having origins in any of the black racial groups of Africa.	
<input type="checkbox"/> Native Hawaiian or Other Pacific Islander	A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.	
<input type="checkbox"/> White	A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.	

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